# (12) UK Patent Application (19) GB (11) 2 180 752(13) A

(43) Application published 8 Apr 1987

21) Application No 8523521	(51) INT CL <sup>4</sup> A61L 2/16		
22) Date of filing <b>24 Sep 1985</b>	AUTE 2/10		
	(52) Domestic classification (Edition I):  A5G 101 D		
	H4J 37F L		
71) Applicant			
T. K. Industrial Supplies	(56) Documents cited		
	GB A 2119203	GB 1011468	GB 0498616
(Incorporated in United Kingdom)	GB A 2031246	GB 0982242	GB 0458852
	GB 1563056	GB 0829193	GB 0425595
240 Ringwood Road, Parkstone, Poole, Dorset	GB 1157643	GB 0667161	
72) Inventor	(58) Field of search		
Trevor Woolard	A5G		
	H4J		
74) Agent and/or Address for Service	Selected US specifications from IPC sub-class A61L		
Carpmaels & Ransford,			
43 Bloomsbury Square, London WC1A 2RA			
40 bloomsbury oquale, conden WOIA 211A	1		

## (54) Bactericidal shields for telephone handsets

(57) A set of bactericidal shields for use on telephone handsets comprises a pair of plastic shields designed to clip over or into the telephone mouthpiece and earpiece respectively, each shield being impregnated with a bactericide which is able to leech out of the shield over a period of time.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1982.

5

10

20

#### **SPECIFICATION**

# A set of bactericidal shields for use on telephone handsets

This invention relates to a set of bactericidal shields for use on telephone handsets, and which may additionally carry one or a combination of a perfume, germicide or disinfectant.

One of the problems with the common telephone is that the mouthpiece and earpiece tend to harbour dirt and germs, and it is therefore not unusual for large organisations to employ specialised firms to clean their tele-15 phones on a regular basis. This is however, expensive, and it is an object of the present invention to do away with this cleaning requirement and at the same time to provide a telephone which is more pleasant to use.

Accordingly, the present invention provides a set of bactericidal shields for use on telephone handsets, the set comprising a pair of plastic shields designed to clip over or into the telephone mouthpiece and earpiece re-25 spectively, each shield being impregnated with a bactericide which is able to leech out of the shield over a period of time.

If desired, each shield may also be impregnated with a germicide, disinfectant, or per-30 fume which is also able to leech out of the shield over the period of time. A preferred perfume is a lemon or pine aroma.

The shields will be shaped as appropriate so as to be able to clip over or into the 35 mouthpice and earpiece respectively and also to be readily removable when a substantial part of the bactericide has leeched out. The shields will thus be disposable.

Preferably, the shields are perforated to 40 match the perforations of the mouthpiece and earpiece respectively of the telephone handset.

The shields may come in many different shapes and sizes so as to be able to fit any type of telephone handset. Preferably, a plural-45 ity of sets of shields would be sold packed in a suitable moisture-proof carton, with each set being individually sealed in an evacuated, sterile plastic or foil container. The carton could be kept by the telephone handset, thereby al-50 lowing the telephone user to change the set at will.

The bactericide preferably is such as to provide prolonged bactericidal activity and may, for example, be in the form of a 0.5% by 55 weight solution of chlorhexidine acetate or gluconate. The solution is preferably aqueous, but may, if desired contain other solvents commonly used in the art.

Preferably, the amount of bactericide, and 60 any other optional ingredients, is adjusted such that substantially all of the ingredients leeches out of the shields in a period of about 14 days.

Conveniently, the bactericide is coloured or 65 the shields are impregnated with a substance which changes colour when a substantial part of the bactericide has leeched out of the shield, thereby providing a ready indication as to when the shields should be changed.

Conveniently, the shields include a section 70 of foamed or otherwise absorbent material in order to enable easy impregnation of the shields by the bactericide and any other optional ingredients. Preferably, such a section is located at the centre of each shield. This will also be of advantage in improving user comfort, especially in respect of the earpiece.

### **CLAIMS**

1. A set of bactericidal shields for use on 80 telephone handsets, the set comprising a pair of plastic shields designed to clip over or into the telephone mouthpiece and earpiece respectively, each shield being impregnated with a bactericide with is able to leech out of the shield over a period of time.

2. The set of shields of claim 1, wherein each shield is also impregnated with a germicide, disinfectant, or perfume which is also 90 able to leech out of the shield over the period of time.

3. The set of shields of claim 1 or claim 2, wherein the shields are perforated to match the perforations of the mouthpiece and ear-95 piece respectively of the telephone handset.

4. The set of shields of any one of claims 1 to 3 wherein the bactericide is coloured or the shields are impregnated with a substance which changes colour when a substantial part 100 of the bactericide has leeched out of the shield, thereby providing a ready indication as to when the shields should be changed.

5. A set of bactericidal shields for use on telephone sandsets, substantially as hereinbe-105 fore described.

Printed for Her Majesty's Stationery Office by Burgess & Son (Abingdon) Ltd, Dd 8991685, 1987. Published at The Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.

BNSDOCID: <GB\_\_ \_2180752A\_\_I\_>